# **United States Department of the Interior Bureau of Land Management**

# Determination of NEPA Adequacy DOI-BLM-CO-S010-2016-0039-DNA

# March 2017

# March 2017 Oil and Gas Lease Sale

**Location:** Fifteen parcels encompassing 15,170.74 acres in San Miguel,

Dolores, Montezuma and Archuleta Counties, Colorado

BLM, Colorado State Office 2850 Youngfield Street Lakewood, Colorado 80215-7093

> Tres Rios Field Office 29211 Highway 184 Dolores, CO 81323 Phone: (970) 882-7296 FAX: (970) 882-6841



# **Determination of NEPA Adequacy**

U.S. Department of the Interior Colorado Bureau of Land Management

**OFFICE:** Tres Rios Field Office

TRACKING NUMBER: DOI-BLM-CO-S010-2015-0039-DNA

<u>CASEFILE/PROJECT NUMBER</u>: Parcels 7789, 7791, 7796, 7800, 7378, 7792, 7801, 7802, 7805, 7806, 7798, 7797, 7799, 7795 and 7787

PROPOSED ACTION TITLE/TYPE: Tres Rios Field Office March 2017 Oil and Gas Lease Sale

LOCATION/LEGAL DESCRIPTION: See Attachments B and C for full legal descriptions

#### BACKGROUND:

It is the policy of the Bureau of Land Management (BLM) as derived from various laws, including the Mineral Leasing Act of 1920 (MLA) and the Federal Land Policy and Management Act of 1976 (FLPMA), to make mineral resources available for disposal and to encourage development of mineral resources to meet national, regional, and local needs.

The BLM's Colorado State Office conducts quarterly competitive sales to lease available oil and gas parcels. A Notice of Competitive Lease Sale (Sale Notice), which lists parcels to be offered at the lease sale auction, is published by the Colorado State Office at least 45 days before the auction is held. Lease stipulations applicable to each parcel are specified in the Sale Notice. The decision as to which public lands and minerals are open for leasing and what leasing stipulations may be necessary, based on information available at the time, is made during the land use planning process. Constraints on leasing and any future development of parcels with surface managed by other federal agencies are determined by the BLM in consultation with the appropriate surface management agency.

In the process of preparing a lease sale, the Colorado State Office sends a draft parcel list to each field office where proposed parcels are located. Field office staff then review the legal descriptions of the parcels to determine if they are in areas open to leasing and that appropriate stipulations have been included; verify whether any new information has become available that might change any analysis conducted during the planning process; confirm that appropriate consultations have been conducted; and identify any special resource conditions of which potential bidders should be made aware. The nominated parcels are posted online for a 30 day public scoping period. This posting also includes the appropriate stipulations as identified in the Tres Rios Field Office Resource Management Plan (TRFO/RMP). The BLM prepares documentation consistent with the National Environmental Policy Act (NEPA) and a draft of that documentation is posted for a 30 day public review and comment period. Comments received from the public are reviewed and considered as applicable.

After the Tres Rios Field Office completes the draft parcel review and NEPA analysis and returns them to the State Office, a list of available lease parcels and associated stipulations is made available to the public through a Notice of Competitive Lease Sale. Lease Sale Notices are posted on the Colorado BLM website at:

http://www.blm.gov/co/st/en/BLM\_Programs/oilandgas/oil\_and\_gas\_lease.html.

On rare occasions, the BLM may defer or withhold offering proposed parcels for lease (up to the day of the lease sale). In such cases, the BLM prepares an addendum to the Sale Notice.

If the parcels are not leased at the March 2017 lease sale, they will be available for noncompetitive leasing pursuant to 43 CFR Subpart 3110 for a period of up to two years following the lease sale. BLM may reconfigure parcels obtained in this way by combining or deleting other previously offered lands.

Mineral estate that is not leased within a two-year period after an initial offering will no longer be available, and must go through a competitive lease sale process again prior to being leased.

The act of leasing does not authorize any development or use of the surface of lease lands, without further application by the operator and approval by the BLM.

In the future, the BLM may receive Applications for Permit to Drill (APDs) for those parcels that are leased. If APDs are received, the BLM conducts additional site-specific NEPA analysis before deciding whether to approve the APD, and what Conditions of Approval (COAs) should apply.

Fifteen parcels comprising approximately 15,173.24acres of Federal mineral estate within the BLM Tres Rios Field Office (TRFO) are recommended for leasing at the March 2017 Oil and Gas Lease Sale. Maps of the proposed parcels are provided in Attachment A. The legal descriptions and applicable stipulations for the fifteen lease parcels proposed for the March 2017 Oil and Gas Lease Sale are included in Attachment C.

This Determination of NEPA Adequacy (DNA) documents the review of the nominated parcels under the administration of the TRFO. It serves to verify conformance with the approved land use plan, and provides the rationale for the field office's recommendation to offer or to defer particular parcels from the lease sale.

In accordance with BLM Colorado Instruction Memorandum (IM) No. 2012-027 and BLM Washington Office IM No. 2010-117, this DNA has been released for 30 days of public comment. Any comments received within the 30-day timeframe have been considered and incorporated into the DNA as appropriate.

#### A. Description of the Proposed Action and Any Applicable Mitigation Measures

Twenty parcels were nominated for offering at the March 2017 Oil and Gas Lease Sale. Of the twenty nominated parcels, the BLM proposes to offer fifteen parcels, totaling 15,170.74 acres, for

lease at the March 2017 Oil and Gas Lease Sale, and to defer from the sale five full parcels (totaling 4,521.52 acres), and portions of eight other parcels (totaling 4571.86 acres), for a combined total of 9,093.38 acres. The legal descriptions for all twenty originally nominated parcels are provided in Attachment B. Maps depicting the fifteen parcels recommended for lease are in provided in Attachment A. The legal descriptions and required stipulations for the fifteen parcels recommended for lease under the proposed action are provided in Attachment C, and full stipulation descriptions are in Attachment D. These stipulations are identified in the 2015 Tres Rios Field Office Resource Management Plan (TRFO/RMP).

The BLM administers the mineral estate of the fifteen parcels recommended for lease, while the BLM, State of Colorado, and private landowners manage the surface estate. These parcels would be offered at public auction for lease for oil and gas exploration and development.

The deferral process for nominated parcels was established to address situations in which legitimate questions arise as to the reasonably foreseeable impacts from leasing of a parcel. The deferral of a parcel does not permanently withdraw the parcel from leasing, but merely indicates that further consideration is needed before a decision is a made regarding whether to offer the parcel at a future lease sale. Under the proposed action, five full parcels and eight partial parcels, totaling 9,093.38 acres from the twenty parcels that were nominated have been recommended for deferral in order to allow for additional review of appropriate protections for cultural resources, Gunnison Sage Grouse habitat, and relevant and important values for proposed Areas of Critical Environmental Concern (ACECs) from oil and gas development. In addition, a portion of one the nominated parcel was excluded from the TRFO's consideration for the March 2017 Oil and Gas Lease Sale because it is outside the boundaries of the TRFO.

#### B. Land Use Plan (LUP) Conformance

*Plan:* Tres Rios Field Office Resource Management Plan (TRFO RMP) *Date Approved:* February 27, 2015

 $\underline{X}$  The proposed action is in conformance with the applicable LUPs because it is specifically provided for in the following LUP decisions:

Decision Language: This program emphasizes the orderly and environmentally responsible development of oil and gas (natural gas and CO2) deposits (page II-111).

The TRFO ROD/RMP identifies areas open for oil and gas leasing (pages II-113 through II-121), and specifies stipulations that would apply to leases (Appendix H). The proposed lease parcels are within the areas identified as open to leasing. Based on the RMP, specific stipulations are attached to each lease parcel.

# C. Identify the applicable National Environmental Policy Act (NEPA) documents and other related documents that cover the proposed action.

BLM Tres Rios Field Office, San Juan National Forest Land and Resource Management Plan Final Environmental Impact Statement (RMP/FEIS) (September 2013).

# D. NEPA Adequacy Criteria

1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. The proposed action is included in an alternative analyzed in the TRFO RMP/FEIS (Sept. 2013). The proposed lease parcels are within the area analyzed by the RMP/FEIS, and leasing and subsequent development of oil and gas resources are specifically analyzed throughout the RMP/FEIS (Sept. 2013), see chapters 3 and 4. Section 3.19 of the RMP/FEIS describes the acres of currently leased and unleased federal minerals, under BLM, Forest Service, and split-estate surface ownership. The RMP/FEIS describes leasing and the types of stipulations which could be applied as resource mitigation, and explains that stipulations, Conditions of Approval and other existing law can mitigate resource concerns during development. The RMP/FEIS also describes average acres of disturbance for development of well pads, roads, pipelines, and other facilities. Other resource sections describe the type and qualitative impact of development on that resource in the RMP/FEIS. All lands considered in this action are open to leasing under the RMP/FEIS, and stipulations have been attached in conformance with the RMP/FEIS.

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action (or existing proposed action), given current environmental concerns, interests, and resource values?

Yes. Five alternatives, covering a full range of oil and gas leasing options, were addressed in the RMP/FEIS (see Section 2.4.6 of that document). The alternatives ranged from the most restrictive, a No Leasing Alternative, to the least restrictive, which made 78% of lands Available for Lease and had a "No Surface Occupancy" stipulation on only 38% of those lands. Other alternatives were considered but eliminated from full analysis in the RMP/FEIS due to being contrary to law or valid existing rights, or similar to analyzed alternatives. The alternatives considered in the TRFO RMP/FEIS are appropriate for the proposed action.

3. Is existing analysis adequate in light of any new information or circumstances (such as, rangeland health standards assessment; recent endangered species listings, updated list of BLM sensitive species)? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new proposed action?

Yes, the existing TRFO RMP/FEIS is adequate. We are not aware of any new information or circumstances that would require modification of the analysis. The existing analysis of the TRFO RMP/FEIS was verified during site-visits to the parcels conducted by BLM TRFO staff in June and July of 2016.

# 4. Are the direct, indirect, and cumulative effects that would result from implementation of the new proposed action similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document?

Yes. The impacts of oil and gas developments, as well as other resource management actions, were addressed in the RMP/FEIS based on a reasonable foreseeable development (RFD) scenario of approximately 2,950 new wells in the next 15 years. Only twenty two new wells have been approved in the eighteen months since the RMP was signed. This represents an average of 1.2 new wells every month, which is only 7% of the RFD's predicted monthly average. Thus, the impacts to date from oil and gas development are much lower than those anticipated under the approved plan, and are within the range of those analyzed in the RMP FEIS.

Additionally the BLM relies on the US Fish and Wildlife Service (FWS) 2008 programmatic biological opinion (PBO) for its fluid minerals program as compliance with its Section 7 duties under the Endangered Species Act with respect to Colorado River fish, because annual withdrawals remain below the volumes used for USFWS's PBO. BLM and FWS both believe that all water depletions addressed in the 2008 PBO have been accounted for and implementation of the 2008 PBO to date remains valid. Nonetheless, BLM and FWS have begun the process of updating the 2008 PBO to incorporate new information.

# 5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action?

Yes. Full public review occurred during the RMP/FEIS process. The RMP/FEIS described reasonably foreseeable impacts associated with activities, such as the proposed lease sale, that could occur under the decisions in the RMP/FEIS. In addition, the BLM provided a public scoping period from May 9 to June 8, 2016, specifically for the proposed lease sale. A courtesy notice for that public scoping period was posted on the BLM web site located at: <a href="http://www.blm.gov/co/st/en/BLM\_Programs/oilandgas/oil\_and\_gas\_lease/2017/february\_2017\_lease.html">http://www.blm.gov/co/st/en/BLM\_Programs/oilandgas/oil\_and\_gas\_lease/2017/february\_2017\_lease.html</a>.

Surface owners for the proposed parcels were notified of the proposed leasing action by mail.

Site visits to the proposed parcels were conducted by members of a BLM TRFO interdisciplinary team of resource specialists (ID Team) on June 2 and July 6-7, 2016.

From August 9 to September 8, 2016, an initial draft of this DNA was posted for a 30 day public review and comment period.

In addition, a notice of the March 2017 competitive oil and gas lease sale is being posted at least forty five (45) days prior to the sale on the BLM web site located at: <a href="http://www.blm.gov/co/st/en/BLM">http://www.blm.gov/co/st/en/BLM</a> Programs/oilandgas/oil and gas lease/2017/february 2 017\_lease.html. The posting of this lease sale notice will initiate a 30 day public protest period that is planned to run from November 10 to December 12, 2016.

# E. Persons/Agencies/BLM Staff Consulted:

Name	Title	Resource/Concern
Ryan Joyner	Natural Resource Specialist	Project Lead
Chad Meister	Physical Scientist	Air/GHG Emissions
Bruce Bourcy	Archaeologist	<b>Cultural Resources</b>
Martin Hensley	Economist	<b>Environmental Justice</b>
Mike Jensen	Botanist	Farmlands; Invasive
		Species/Noxious Weeds;
		Rangeland Health; Special
		<b>Status Plant Species</b> ;
		Threatened or Endangered
		Plant Species; Vegetation;
Russ Japuntich	Biologist	Fish Habitat
Kelly Palmer	Hydrologist	Floodplains
Ian Barrett	Fuels Specialist	Fuels/Fire Management
Harrison Griffin	Realty Specialist	Lands/Access
Jennifer Jardine	Realty Specialist	Lands/Access
Nathaniel West	Biologist	Migratory Birds; Special
		Status Animal Species;
		Threatened or Endangered
		Animal Species; Wildlife-
		aquatic, terrestrial, riparian
		zones;
James Blair	Geologist	Geology; Solid Minerals;
		Paleontology;
Jeffrey Christenson	Recreation Planner	Lands with Wilderness
		Characteristics; Recreation;
		Visual Resources; Wild and
		Scenic Rivers; Wilderness/
		WS
Marrieta Eaton	AHC Manager	Native American Religious
		Concerns
Gina Jones/Justin	NEPA Coordinator/Asst.	NEPA Compliance
Abernathy	Field Manager	

In addition, the list of preparers, cooperating agencies, and tribes participating in the original RMP/FEIS is available in the FEIS, Chapter 4.

# **Remarks:**

# **CULTURAL RESOURCES:**

The leasing of federal mineral rights for potential oil and gas exploration and production is an undertaking under section 106 of the National Historic Preservation Act (NHPA).

The TRFO RMP FEIS process was conducted in accordance with all requirements of the NHPA. Tribal consultation and compliance with section 106 of the NHPA specifically for the subject lease sale was completed on January 20<sup>th</sup>, 2017. The consulted Tribes were asked to provide any information that they are aware of regarding cultural resources that may be adversely impacted by the proposed lease sale.

The act of leasing the proposed parcels, by itself, will not result in direct impacts to cultural resources, including those that are listed or eligible for listing as historic properties on the National Register of Historic Places. However, leasing the proposed parcels may have indirect impacts on cultural resources. Leasing allows for the future development of oil and gas resources from the parcels, subject to the lease terms, the stipulations attached to the leases and the applicable laws and regulations. Oil and gas exploration and development has the potential to impact the setting for cultural resource sites and it may provide for more public access (authorized or unauthorized) in the areas where development occurs. The density of any future oil and gas development and the potential for increased public access could contribute to direct, indirect, or cumulative effects on cultural resources, which might include illegal artifact collection and vandalism.

Any oil and gas exploration and/or development proposed in the future for the subject lease parcels would be subject to additional site-specific cultural resources reviews and analysis in accordance with the requirements of the NHPA, including cultural resources inventories, effects assessments, Tribal consultation, and if necessary, actions to resolve potential adverse effects. This requirement is outlined in controlled surface use (CSU) stipulation CO-39, which is attached to each lease parcel. At that time, any adverse effects of proposed development on historic properties would be identified and mitigated, if necessary.

# CONCLUSION

# Plan Conformance:

- X This proposal conforms to the applicable land use plan.
- This proposal does not conform to the applicable land use plan

# Determination of NEPA Adequacy

- X Based on the review documented above, I conclude that this proposal conforms to the applicable land use plan and that the NEPA documentation fully covers the proposed action and constitutes BLM's compliance with the requirements of the NEPA.
- The existing NEPA documentation does not fully cover the proposed action. Additional NEPA documentation is needed if the project is to be further considered.

Signature of Project Lead

Signature of NEPA Coordinator

Cauchents

Signature of the Responsible Official

Date

3/2/17

Date

3-2-17

Date

**Note:** The signed <u>Conclusion</u> on this Worksheet is part of an interim step in the BLM's internal decision process and does not constitute an appealable decision. However, the lease, permit, or other authorization based on this DNA is subject to protest or appeal under 43 CFR Part 4 and the program-specific regulations.

# **ATTACHMENTS:**

Attachment A: Maps

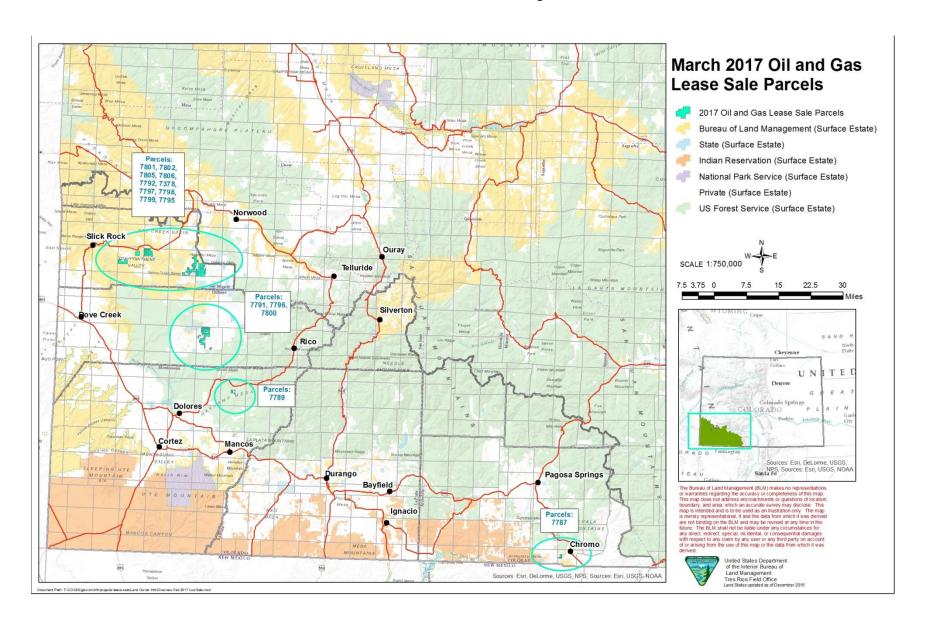
Attachment B: Legal Descriptions of all Nominated Parcels

Attachment C: Parcels Recommended for Lease with Applied Stipulations

Attachment D: Stipulation Descriptions

Attachment E: Responses to Public Comments

# **ATTACHMENT A: Maps**



# **Attachment B: Legal Descriptions of All Nominated Parcels**

#### **PARCEL ID: 7789**

# T.0380N., R.0130W., NMPM

Section 15: SENW,S2S2SW;

Section 16: S2NE,SE;

Section 22: NENW;

Montezuma County

Colorado 360.000 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7790 (Deferred Entirely)

# T.0420N., R.0130W., NMPM

Section 28: S2S2;

**Dolores County** 

Colorado 160.000 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7791 (Deferred in Part)

# T.0400N., R.0140W., NMPM

Section 4: Lot 1-12;

Section 4: S2;

Section 5: Lot 1-12;

Section 5: S2;

Section 6: Lot 2-6,12;

Section 6: S2SE;

**Dolores County** 

Colorado 1727.440 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7796 (Deferred in Part)

# T.0400N., R.0140W., NMPM

Section 7: E2,SESW;

Section 8: W2NE,SENE,N2NW,SENW;

Section 8: NESW,E2SE; Section 9: NENE,S2N2,S2; Section 17: NENE,S2NE,S2; Section 18: E2NW,E2SE;

**Dolores County** 

Colorado 1840.000 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7800 (Deferred in Part)

# T.0400N., R.0140W., NMPM

Section 19: NE;

Section 20: W2,SE;

Section 27: E2SW,SWSW;

Section 29: E2,SW;

**Dolores County** 

Colorado 1240.000 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7801 (Deferred in Part)

# T.0430N., R.0140W., NMPM

Section 17: W2NE, SENE, SE;

Section 19: E2;

Section 20: NE,W2,NESE,W2SE;

San Miguel County

Colorado 1200.000 Acres

PVT/BLM; COS:TRFO

# **PARCEL ID: 7802**

# T.0430N., R.0140W., NMPM

Section 29: W2NE,NW,S2;

Section 30: Lot 2-4;

Section 30: E2,SESW;

Section 31: Lot 1-4;

Section 31: E2,E2W2;

Section 32: ALL;

# San Miguel County

Colorado 2360.540 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7804 (Deferred Entirely)

T.0430N., R.0140W., NMPM

Section 23: SENE, SWNW, E2SE;

Section 26: NE, W2SE;

San Miguel County

Colorado 400.000 Acres

PVT/BLM; COS:TRFO

**PARCEL ID: 7805** 

T.0430N., R.0140W., NMPM

Section 18: Lot 2,3;

Section 18: SENW, NESW;

San Miguel County

Colorado 161.030 Acres

PVT/BLM; COS:TRFO

**PARCEL ID: 7806** 

T.0430N., R.0140W., NMPM

Section 28: W2W2; Section 33: W2NW;

Section 33. WZINW,

San Miguel County

Colorado 240.000 Acres

PVT/BLM; COS:TRFO

PARCEL ID: 7793 (Deferred Entirely)

T.0430N., R.0150W., NMPM

Section 1: Lot 3,4;

Section 1: S2NW,SW;

Section 2: Lot 1-4;

Section 2: S2N2,S2;

Section 3: Lot 1-4;

Section 3: S2N2,S2;

San Miguel County

Colorado 1601.080 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7794 (Deferred Entirely)

# T.0430N., R.0150W., NMPM

Section 4: Lot 1-4;

Section 4: S2N2,S2;

Section 5: Lot 1-4;

Section 5: S2N2,S2;

Section 8: E2;

Section 9: ALL;

San Miguel County

Colorado 2240.440 Acres

BLM; COS:TRFO

# PARCEL ID: 7795 (Deferred in Part)

# T.0430N., R.0150W., NMPM

Section 10: ALL;

Section 11: ALL;

Section 12: ALL;

San Miguel County

Colorado 1920.000 Acres

BLM;PVT/BLM; COS:TRFO

# PARCEL ID: 7797 (Deferred in Part)

# T.0430N., R.0150W., NMPM

Section 13: ALL;

Section 14: ALL;

Section 23: NE,NENW,E2SE;

Section 24: ALL;

San Miguel County

Colorado 2200.000 Acres

PVT/BLM; COS:TRFO

# PARCEL ID: 7798 (Deferred in Part)

# T.0430N., R.0150W., NMPM

Section 25: W2NE,E2NW,SW,S2SE;

Section 26: S2NE,W2,SE;

Section 34: NENE;

Section 35: N2N2,SWNE,NESW,SWSE;

San Miguel County

Colorado 1280.000 Acres

PVT/BLM;BLM; COS:TRFO

**PARCEL ID: 7799** 

# T.0430N., R.0150W., NMPM

Section 34: S2NW,SW,S2SE;

San Miguel County

Colorado 320.000 Acres

PVT/BLM; COS:TRFO

#### **PARCEL ID: 7792**

# T.0430N., R.0160W., NMPM

Section 5: Lot 3,4;

Section 5: S2NW,S2;

Section 6: Lot 1-7;

Section 6: S2NE,SENW,E2SW,SE;

Section 7: Lot 1-4;

Section 7: E2,E2W2;

Section 8: ALL;

San Miguel County

Colorado 2396.680 Acres

BLM;PVT/BLM; COS:TRFO

# PARCEL ID: 7378 (Deferred in Part)

# T.0430N., R.0170W., NMPM

Section 11: ALL;

Section 19: Lot 1-4;

Section 19: E2,E2W2; Section 20: ALL;

Section 21: SWNW,SW;

San Miguel County

Colorado 2116.280 Acres

BLM; COS:TRFO

PARCEL ID: 7786 (Deferred Entirely)

T.0390N., R.0190W., NMPM

Section 17: W2SE; Section 18: Lot 16;

**Dolores County** 

Colorado 120.000 Acres

PVT/BLM; COS:TRFO

**PARCEL ID: 7787** 

T.0320N., R.0010E., NMPM

Section 7: Lot 5-10; Section 7: NE;

Archuleta County

Colorado 383.130 Acres

BLM; COS:TRFO

# **ATTACHMENT C: Parcels Recommended for Lease with Applied Stipulations**

THE FOLLOWING PUBLIC DOMAIN LANDS ARE SUBJECT TO FILINGS IN THE MANNER SPECIFIED IN THE APPLICABLE PORTIONS OF THE REGULATIONS IN 43 CFR. SUBPART 3120.

#### **PARCEL ID: 7789**

# T.0380N., R.0130W., NMPM

Section 15: SENW,S2S2SW;

Section 16: S2NE,SE;

Section 22: NENW;

#### Montezuma County

Colorado 360.000 Acres

The following lands are subject to Exhibit 1.3.1 for perennial water, fens/wetlands, lotic/lentic springs and seeps, and riparian areas:

# T.038N., R.013W., NMPM

Section 16: S2NE;

Section 22: NENW;

The following lands are subject to Exhibit 1.3.2 for perennial water, fens/wetlands, lotic/lentic springs and seeps, and riparian areas:

# T.038N., R.013W., NMPM

Section 15: SENW;

Section 16: S2NE;

Section 22: NENW;

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

### T.038N., R.013W., NMPM

Section 15: SENW;

Section 16: S2NE, SE;

Section 22: NENW;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35 percent:

# T.0380N., R.0130W., NMPM

Section 15: SENW;

The following lands are subject to Exhibit 3.2.1 for Lynx:

#### T.0380N., R.0130W., NMPM

Section 15: SENW;

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

#### **PARCEL ID: 7791**

#### T.0400N., R.0140W., NMPM

Section 4: Lot 1-12;

Section 4: S2:

Section 5: Lot 1-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW, SESW, SE;

**Dolores County** 

Colorado 1465.58 Acres

The following lands are subject to Exhibit 1.3.1 for perennial water, fens/wetlands, lotic/lentic springs and seeps, and riparian areas:

# T.040N., R.014W., NMPM

Section 4: Lots 1, 3, 4, 6, 8-11;

Section 4: S2;

Section 5: Lots 1, 2, 4-6, 10-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW,SESW,SE

The following lands are subject to Exhibit 1.3.2 for perennial water, fens/wetlands, lotic/lentic springs and seeps, and riparian areas:

#### T.040N., R.014W., NMPM

```
Section 4: Lots 1, 3, 4, 6, 8-11;
```

Section 4: S2;

Section 5: Lots 1, 2, 4-6, 10-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW,SESW,SE

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

# T.040N., R.014W., NMPM

Section 4: Lots 1, 3-12;

Section 4: S2;

Section 5: Lots 2, 4-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW,SESW,SE;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.040N., R.014W., NMPM

Section 4: Lots 1, 3-12;

Section 4: S2;

Section 5: Lots 2, 4-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW,SESW,SE;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35 percent:

#### T.0400N., R.0140W., NMPM

Section 4: Lots 1-12;

Section 5: Lots 1-12;

Section 5: N2SW,N2SWSW,N2SWSWSW;

Section 5: SESWSW,SESW,SE;

All lands are subject to Exhibit 3.8.1 migratory birds lease notice

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.10.1 for big game parturition.

All lands are subject to Exhibit 3.10.2 for big game production areas.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

#### **PARCEL ID: 7796**

# T.0400N., R.0140W., NMPM

Section 7: S2SE;

Section 8: W2NE,SENE,E2NW;

Section 8: E2NWNW, NESW, E2SE;

Section 9: NENE,S2N2,S2; Section 17: NENE,S2NE,S2;

Section 18: E2NW, E2SE;

# **Dolores County**

Colorado 1540.000 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

# T.0400N., R0140W., NMPM

Section 7: S2SE;

Section 8: W2NE.SENE

Section 9: NENE,S2N2,S2;

Section 17: NENE,S2NE,S2;

Section 18: E2NW,E2SE;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

# T.0400N., R0140W., NMPM

Section 7: S2SE;

Section 8: W2NE,SENE,E2NW,E2NWNW;

Section 9: NENE,S2NE,S2;

Section 17: NENE,S2NE,S2;

```
Section 18: E2NW, E2SE;
```

All lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams.

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

#### T.040N., R.014W., NMPM

Section 7: S2SE;

Section 8: W2NE,SENE,E2NW;

Section 8: E2NWNW,NESW,E2SE;

Section 9: NENE,S2N2,S2;

Section 17: NENE,S2NE,S2;

Section 18: E2NW;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

### T.0400N., R0140W., NMPM

Section 7: S2SE;

Section 8: W2NE,SENE,E2NW;

Section 8: E2NWNW,NESW,E2SE;

Section 9: S2N2,S2;

Section 17: S2NE,S2;

The following lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils:

# T.0400N., R0140W., NMPM

Section 9: S2;

The following lands are subject to Exhibit 3.10.1 for big game parturition:

# T.0400N., R0140W., NMPM

Section 7: S2SE;

Section 8: W2NE;

Section 8: E2NWNW;

Section 9: NENE,S2N2,S2;

The following lands are subject to Exhibit 3.10.2 for big game production:

#### T.0400N., R0140W., NMPM

Section 7: S2SE;

Section 8: W2NE;

Section 8: E2NWNW;

Section 9: NENE,S2N2,S2;

Section 17: S2NE,S2;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

#### T.0400N., R0140W., NMPM

Section 9: S2;

All lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams.

All lands are subject to Exhibit 3.8.1 Migratory Birds Lease Notice

All lands are subject to Exhibit 3.9.1 Raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 Raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7800** 

# T.0400N., R.0140W., NMPM

Section 19: E2NE,E2W2NE;

Section 20: W2,SE;

Section 27: E2SW,N2SWSW,SESWSW;

Section 29: E2E2NE,E2NESE;

**Dolores County** 

Colorado 770.00 Acres

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

# T.040N., R014W., NMPM

Section 19: E2NE,E2W2NE;

Section 20: W2,SE;

Section 27: E2SW;

Section 29: E2E2NE,E2NESE;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.040N., R014W., NMPM

Section 19: E2NE,E2W2NE;

Section 20: W2,SE; Section 27: E2SW;

Section 29: E2E2NE,E2NESE;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

#### T.0400N., R0140W., NMPM

Section 20: W2;

Section 29: E2E2NE,E2NESE;

The following lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils:

# T.0400N., R0140W., NMPM

Section 19: E2NE,E2W2NE;

Section 20: W2,SE;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

# T.0400N., R0140W., NMPM

Section 20: SE;

Section 27: E2SW,SWSW;

All lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens/wetlands.

All lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens/wetlands.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7801** 

# T.0430N., R.0140W., NMPM

Section 19: E2;

Section 20: NE,W2,NESE,W2SE;

San Miguel County

Colorado 920.000 Acres

The following lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA):

# T. 0430N., R.0140W., NMPM

Section 19: E2;

Section 20: W2, W2SE

The following lands are subject to Exhibit 1.4.1 for intermittent and ephemeral streams:

# T.0430N., R0140W., NMPM

Section 19: E2;

Section 20: W2;

The following lands are subject to Exhibit 1.4.2 for intermittent and ephemeral streams:

# T.0430N., R0140W., NMPM

Section 19: E2;

Section 20: W2;

The following lands are subject to Exhibit 1.7.1 for reservoirs and lakes:

# T.0430N., R0140W., NMPM

Section 19: E2;

Section 20: NESE;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

# T.0430N., R0140W., NMPM

Section 20: NE, W2, NESE, W2SE;

The following lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils:

T.0430N., R0140W., NMPM

Section 19: E2;

Section 20:NE,W2;

The following lands are subject to Exhibit 3.10.2 for big game winterrange:

T.0430N., R014W., NMPM

Section 20: NE, NESE;

The following lands are subject to Exhibit 3.10.3 for big game winterrange:

T.0430N., R014W., NMPM

Section 20: NE,NESE;

All lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7802** 

T.0430N., R.0140W., NMPM

Section 29: W2NE,NW,S2;

Section 30: Lot 2-4;

```
Section 30: E2,SESW;
Section 31: Lot 1-4;
Section 31: E2,E2W2;
Section 32: ALL;
```

San Miguel County

Colorado 2360.540 Acres

The following lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA):

# T.0430N., R.0140W., NMPM

```
Section 29: W2NE,NW,S2;
Section 30: Lot 4;
Section 30: E2,SESW;
Section 31: Lot 1, 2;
Section 31: E2,E2W2;
```

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

# T.0430N., R0140W., NMPM

Section 32: ALL;

```
Section 29: W2NE,S2;
Section 30: Lot 4;
Section 30: E2,SESW;
Section 31: Lot 1, 2;
Section 31: E2,E2W2;
Section 32: All;
```

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

# T.0430N., R0140W., NMPM

```
Section 29: W2NE,S2;
Section 30: Lot 4;
Section 30: E2,SESW;
Section 31: Lot 1, 2;
Section 31: E2,E2W2;
Section 32: All;
```

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

# T.0430N., R0140W., NMPM

Section 29: S2;

```
Section 30: Lot 4;
Section 30: E2;
Section 31: Lot 1;
Section 31: E2,E2W2;
Section 32: All;
```

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.0430N., R0140W., NMPM

```
Section 29: S2;
Section 30: Lot 4;
Section 30: E2;
Section 31: Lot 1;
Section 31: E2,E2W2;
Section 32: All;
```

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

# T.0430N., R0140W., NMPM

```
Section 29: W2NE,NW,S2;
Section 30: E2;
Section 31: Lots 3-4;
Section 31: E2,E2W2;
Section 32: All;
```

The following lands are subject to Exhibit 1.10.1 for Lands with 25 to 35 percent slope and shale soils:

# T.0430N., R0140W., NMPM

Section 31: Lot 2,3;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

# T.0430N., R0140W., NMPM

```
Section 30: Lot 2-4;
Section 30: E2,SESW;
Section 31: Lot 1-3;
Section 31: E2,E2W2;
```

The following lands are subject to Exhibit 3.10.3 to protect big game winter habitat:

# T.0430N., R.0140W., NMPM

Section 30: Lot 2-4; Section 31: Lot 1-4;

All lands are subject to Exhibit 3.8.1 Migratory Birds Lease Notice

All lands are subject to Exhibit 3.9.1 Raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 Raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for Biological Soil Crusts

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7805** 

#### T.0430N., R.0140W., NMPM

Section 18: Lot 2,3;

Section 18: SENW, NESW;

San Miguel County

Colorado 161.030 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

#### T.0430N., R0140W., NMPM

Section 18: Lot 3; Section 18: NESW;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

#### T.0430N., R0140W., NMPM

Section 18: Lot 3; Section 18: NESW;

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

# T.0430N., R0140W., NMPM

Section 18: Lot 3;

Section 18: NESW;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

T.0430N., R0140W., NMPM

Section 18: Lot 3; Section 18: NESW:

All lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA).

All lands are subject to Exhibit 3.8.1 migratory birds lease notice

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.10.2 for big game critical winter range

All lands are subject to Exhibit 3.10.3 for big game critical winter range

All lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog

All lands are subject to Exhibit 1.13.1 for biological soil crusts

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal

All lands are subject to Exhibit CO-39 to protect cultural resources

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7806** 

T.0430N., R.0140W., NMPM

Section 28: W2W2; Section 33: W2NW;

San Miguel County

Colorado 240.000 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

T.0430N., R0140W., NMPM

Section 33: W2NW;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian

areas, and fens:

T.0430N., R0140W., NMPM

Section 28: W2NW, Section 33: W2NW;

All lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA).

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35% all lands are subject to Exhibit CO-27 to protect steep slopes.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7795** 

T.0430N., R.0150W., NMPM

Section 12: E2NE, SWNE, E2SW, SENWSW;

Section 12: SWSW, SE;

San Miguel County

Colorado 410,000 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

T.0430N., R0150W., NMPM

Section 12: E2NE, SWNE, E2SW, SENWSW;

Section 12: SWSW, SE;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

# T.0430N., R0150W., NMPM

Section 12: E2NE, SWNE, E2SW, SENWSW;

Section 12: SWSW, SE;

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

T.0430N., R0150W., NMPM

Section 12: E2NE, SWNE, SE;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

T.0430N., R0150W., NMPM

Section 12: E2NE, SWNE, SE;

The following lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA):

# T.0430N., R0150W., NMPM

Section 12: SWSW;

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.10.2 for big game winter range.

All lands are subject to Exhibit 3.10.3 for big game winter range:

All lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for

supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

#### **PARCEL ID: 7797**

#### T.0430N., R.0150W., NMPM

Section 13: E2;

Section 24: E2,E2W2,NESWNW;

Section 24: S2SWNW, N2NWSW, SENWSW;

San Miguel County

Colorado 860.000Acres

All lands are subject to Exhibit 3.13.1 for State Wildlife Areas (Dry Creek Basin SWA).

All lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%.

All lands are subject to Exhibit 3.10.2 for big game winterrange.

All lands are subject to Exhibit 3.10.3 for big game winterrange.

All lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams.

All lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils.

All lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog.

All lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

#### **PARCEL ID: 7798**

#### T.0430N., R.0150W., NMPM

Section 25: W2NE,E2NW,SW,S2SE;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 34: NENE;

Section 35: N2N2,SWNE,NESW,SWSE;

#### San Miguel County

Colorado 1190.000 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

# T.0430N., R0150W., NMPM

Section 25:W2NE,E2NW,SW;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 35: N2N2,SWNE,NESW,SWSE;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

# T.0430N., R0150W., NMPM

Section 25: E2NW,SW,S2SE;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 35: SWSE;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

# T.0430N., R0150W., NMPM

Section 25: W2NE,E2NW,SW;

Section 26: S2NW, S2;

Section 34: NENE;

Section 35: N2N2,SWNE,NESW,SWSE;

The following lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils:

# T.0430N., R0150W., NMPM

Section 25: W2NE, E2NW, SW;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 35: SWNE, NESW, SWSE;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

#### T.0430N., R0150W., NMPM

Section 25: W2NE,E2NW;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 35: N2N2, SWNE, NESW, SWSE;

The following lands are subject to Exhibit 3.10.3 to protect big game winter habitat:

#### T.0430N., R.0150W., NMPM

Section 25: W2NE,E2NW,SW,S2SE;

Section 26: NWNENW, S2NENW, NWNW;

Section 26: S2NW, S2;

Section 35: N2N2, SWNE, NESW, SWSE:

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for

supplementary air quality analysis and mitigation.

PVT/BLM;BLM; COS:TRFO

**PARCEL ID: 7799** 

T.0430N., R.0150W., NMPM

Section 34: S2NW,SW,S2SE;

San Miguel County

Colorado

320.000 Acres

All lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens.

All lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%.

All lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams.

All lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

PVT/BLM; COS:TRFO

**PARCEL ID: 7792** 

# T.0430N., R.0160W., NMPM

```
Section 5: Lot 3,4;
Section 5: S2NW,S2;
Section 6: Lot 1-7;
Section 6: S2NE,SENW,E2SW,SE;
Section 7: Lot 1-4;
Section 7: E2,E2W2;
```

# San Miguel County

Colorado 2396.680 Acres

Section 8: ALL;

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas and fens:

# T.0430N., R.0160W., NMPM

```
Section 5: Lots 3,4;
Section 5: S2NW,S2;
Section 6: Lots 2, 4-6,
Section 6: S2NE,SENW,E2SW,SE;
Section 8: All;
```

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

# T.043N., R.016W., NMPM

```
Section 5: Lot 3-4;
Section 5: S2NW, S2;
Section 6: Lot 1, 4, 5, 7;
Section 6: S2NE,SENW,E2SW;
Section 7: Lot 1, 2, 4;
Section 7: E2,E2SW;
Section 8: All;
```

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.043N., R.016W., NMPM

```
Section 5: Lot 3-4;
Section 5: S2NW,S2;
Section 6: Lots 1, 4, 5, 7;
Section 6: S2NE,SENW,E2SW;
Section 7: Lot 1, 2, 4;
Section 7: E2,E2SW;
Section 8: All;
```

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas and fens:

### T.0430N., R.0160W., NMPM

Section 5: Lot 3, 4; Section 5: S2NW,S2; Section 6: Lot 2, 4-6; Section 6: S2NE SENW E2SN

Section 6: S2NE,SENW,E2SW,SE;

Section 7: Lot 4; Section 8: All;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

# T.0430N., R0160W., NMPM

Section 6: Lot 7; Section 7: Lot 1,2; Section 7: E2,E2NW; Section 8: All;

The following lands are subject to Exhibit 1.10.1 for lands with 25 to 35 percent slope and shale soils:

# T.0430N., R0160W., NMPM

Section 7: Lot 3,4; Section 8: All;

The following lands are subject to Exhibit 1.12.1 for lands with gypsum soils:

# T.0430N., R.0160W., NMPM

Section 5: Lot 3,4; Section 5: S2NW,S2; Section 6: Lot 1-7;

Section 6: S2NE, SENW, E2SW, SE;

Section 7: NE; Section 8: All;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

# T.0430N., R0160W., NMPM

Section 5: Lot 3,4;

Section 5: S2NW,S2;

Section 6: Lot 1-7;

Section 6: S2NE, SENW, E2SW, SE;

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.10.2 for big game winter range.

All lands are subject to Exhibit 3.10.3 for winter range.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

BLM;PVT/BLM; COS:TRFO

#### **PARCEL ID: 7378**

#### T.0430N., R.0170W., NMPM

Section 11: ALL;

Section 19: Lot 1-4;

Section 19: W2NENWNE, SENENWNE;

Section 19: W2NWNE, SENWNE, SWNE;

Section 19: E2W2,SE;

Section 20: E2,SW;

Section 21: SWNW, W2SW;

# San Miguel County

Colorado 1793.78 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas and fens:

# T.0430N., R.0170W., NMPM

Section 11: ALL;

Section 20: E2,SW;

Section 21: SWNW, W2SW;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian

areas and fens:

# T.0430N., R.0170W., NMPM

Section 11: ALL; Section 20: E2,SW;

Section 20: E2,5 w,
Section 21: SWNW,W2SW;

The following lands are subject to Exhibit 1.4.1 for intermittent or ephemeral streams:

#### T.043N., R.017W., NMPM

Section 11: All;

Section 19: Lots 1-4;

Section 19: W2NENWNE, SENENWNE;

Section 19: W2NWNE,SENWNE,SWNE;

Section 19: E2W2,SE;

Section 20: E2,SW;

Section 21: SWNW, W2SW;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.043N., R.017W., NMPM

Section 11: All;

Section 19: Lots 1-4;

Section 19: W2NENWNE, SENENWNE;

Section 19: W2NWNE,SENWNE,SWNE;

Section 19: E2W2,SE;

Section 20: E2,SW;

Section 21: SWNW, W2SW;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

# T.0400N., R0170W., NMPM

Section 11: ALL;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

#### T.0430N., R.0170W., NMPM

Section 20: E2, SW;

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.10.2 for big game winter range.

All lands are subject to Exhibit 3.10.3 for big game winter range.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

BLM; COS:TRFO

**PARCEL ID: 7787** 

# T.0320N., R.0010E., NMPM

Section 7: Lot 5-10; Section 7: NE;

**Archuleta County** 

Colorado 383.130 Acres

The following lands are subject to Exhibit 1.3.1 for perennial streams, water bodies, riparian areas, and fens:

# T.0320N., R0010E., NMPM

Section 7: Lot 6,7,10; Section 7: NE;

The following lands are subject to Exhibit 1.3.2 for perennial streams, water bodies, riparian areas, and fens:

# T.032N., R001E., NMPM

Section 7: Lot 10; Section 7: NE;

The following lands are subject to Exhibit 1.4.2 for intermittent or ephemeral streams:

# T.032N., R.001E., NMPM

Section 7: Lot 7-8;

Section 7: NE;

The following lands are subject to Exhibit 1.9.1 for lands with slopes greater than 35%:

# T.0320N., R0010E., NMPM

Section 7: Lot 5,7-10;

Section 7: NE;

The following lands are subject to Exhibit 3.11.1 for Gunnison Prairie Dog:

# T.0320N., R0010E., NMPM

Section 7: Lot 5-9;

Section 7: NE;

The following lands are subject to Exhibit 2.1.1 to protect special status plant species:

# T.0320N., R.0010E., NMPM

Section 7: NE;

The following lands are subject to Exhibit 3.10.3 to protect big game winter habitat:

# T.0320N., R.0010E., NMPM

Section 7: Lot 9,10;

All lands are subject to Exhibit 1.2.1 for major river corridors.

All lands are subject to Exhibit 3.8.1 migratory birds lease notice.

All lands are subject to Exhibit 3.9.1 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 3.9.2 raptors, as mapped in the TRFO GIS database.

All lands are subject to Exhibit 1.13.1 for biological soil crusts.

All lands are subject to Exhibit CO-34 to alert lessee of potential habitat for a threatened, endangered, candidate, or other special status plant or animal.

All lands are subject to Exhibit CO-39 to protect cultural resources.

All lands are subject to Exhibit CO-56 (Lease Notice) to alert lessees of potential for supplementary air quality analysis and mitigation.

BLM; COS:TRFO

# **ATTACHMENT D: Stipulation Descriptions**

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

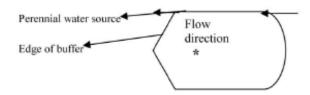
# Perennial Streams, Water Bodies, Riparian Areas, and Fens

No surface occupancy or use is allowed on the lands described below: Prohibit surface occupancy and surface-disturbing activities within a minimum buffer distance of 325 horizontal feet for all perennial waters. For perennial streams, the buffer would be measured from the ordinary high water mark (bankfull stage), whereas for wetland features, the buffer would be measured from the edge of the mapped extent (Table H.1). For unmapped wetlands, the vegetative boundary (from which the buffer originates) would be determined in the field. Where the riparian zone extends beyond 325 feet, the NSO stipulation would be extended to include the entire riparian zone.

Table H.1: No Surface Occupancy Buffers for Perennial Waters

Water Body Type	Buffer Width (feet)
Fens and wetlands	325*
Perennial streams (with or without fish)	325 (as measured from ordinary high water mark)
Lotic or lentic springs and seeps	325 (as measured from wetland vegetation edge)
Riparian	325 (or greater if riparian area is wider than 325 feet)

<sup>\*</sup>See Modification.



Wetland buffer dimensions may be averaged to accommodate variability in terrain or development plans. Up-gradient distances should be maintained (i.e., up- gradient buffer distances of 325 feet), while down-gradient buffers may be reduced to no less than 100 feet. The buffer averaging must, however, not adversely affect wetland functions and values, and a minimum buffer distance of 100 feet from the wetland edge is maintained. The buffer's intent is to protect the water source area of the wetland, which is more important than the down-gradient portion of the wetland.

For the purpose of: Maintaining the proper functioning condition, including the vegetative, hydrologic and geomorphic functionality of the perennial water body. Protect water quality, fish habitat, aquatic habitat, and provide a clean, reliable source of water for downstream users. Buffers are expected to indirectly benefit migratory birds, wildlife habitat, amphibians, and other species.

*Justification*: Wetlands, floodplains, riparian areas, water influence zones, and fens represent important ecological components and functions, such as storing water, stabilizing valley floors,

enhancing water quality, and providing recreation and aesthetic values, biological diversity, and wildlife species with habitat, water, food, cover, and travel routes. They are easily disturbed by ground-disturbing activities that can cause soil erosion, soil compaction, and adverse changes to the hydrologic function that is important to maintaining the hydrologic and ecological integrity of these lands.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

Lease Number: <LEASE\_NUMBER>

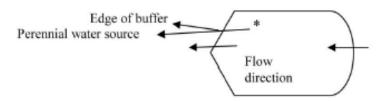
#### CONTROLLED SURFACE USE

# Perennial Streams, Water Bodies, Riparian Areas, and Fens

Surface occupancy or use is subject to the following special operating constraints: From 325 to 500 horizontal feet from the perennial water body, CSU restrictions would apply. Surface-disturbing activities may require special engineering design, construction and implementation measures, including re-location of operations beyond 656 feet (200 meters) to protect water resources within the 325 foot NSO buffer. For perennial streams, the buffer would be measured from ordinary high water mark (bankfull stage), whereas for wetland features, the buffer would be measured from the edge of the mapped extent (Table H.2). For unmapped wetlands, the vegetative boundary (from which the buffer originates) would be determined in the field.

Table H.2: Controlled Surface Use buffers for perennial waters.

Water Body Type	Buffer Width (feet)
Fens and wetlands	325-500*
Perennial streams (with or without fish)	325–500 (as measured from ordinary high water mark)
Lotic or lentic springs and seeps	325-500 (as measured from wetland vegetation edge)



For the purpose of: Maintaining the proper functioning condition, including the vegetative, hydrologic, and geomorphic functionality of the perennial water body, to protect water quality, fish habitat, and aquatic habitat and provide a clean, reliable source of water for downstream users. Buffers are expected to indirectly benefit migratory birds, wildlife habitat, amphibians, and other species.

*Justification*: Minimizing potential deterioration of water quality; maintaining natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities; and preserving wildlife habitat. The buffers are sized to accommodate the rivers' larger floodplains and wider riparian zones.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

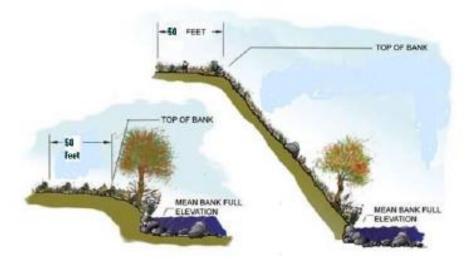
#### EXHIBIT 1.4.1

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

# **Intermittent and Ephemeral Streams**

*No surface occupancy or use is allowed in the lands described below*: NSO of 50 horizontal feet as measured from the top of the stream bank for all intermittent or ephemeral streams (see diagram). If riparian vegetation extends beyond the top of the stream bank, the buffer would be measured from the extent of the riparian vegetation.



*For the purpose of:* Maintaining and protecting water quality, stream stability, aquatic health, seasonal use and downstream fisheries, and sediment processes downstream.

*Justification*: Minimizing potential deterioration of water quality and maintaining natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.4.2**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

#### **Intermittent and Ephemeral Streams**

Surface occupancy or use is subject to the following special operating constraints: CSU from the edge of the NSO buffer to 100 horizontal feet. Avoid locating roads, stream crossings, and facilities within this zone, because activities within this area can potentially affect streams and water quality. Adequate professional design and engineering of activities in this zone is necessary to prevent stormwater runoff and sedimentation. Measurement is from the top of the stream bank, although if wetland vegetation exists, then the measurement is from the vegetation's edge.

**For the purpose of:** Minimizing the risk of sedimentation, spills, and other contaminants reaching intermittent and/or ephemeral streams to protect water quality, stream function, and aquatic habitat.

*Justification*: CSU in this zone would minimize potential deterioration of water quality, maintain natural hydrologic function and condition of stream channels, banks, floodplains, and riparian communities.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.6.1**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

#### **Groundwater Resources (shallow)**

Surface occupancy or use is subject to the following special operating constraints: Oil and gas surface operations over shallow (<2,000 feet) potentially usable groundwater (<10,000 total dissolved solids) shall use the following protection measures:

- Pitless, self-contained drilling systems.
- In the completion of an oil, gas, injection, disposal, or service well, where acidizing or fracture processes are used, no deleterious substances shall be permitted to pollute subsurface water.
- Flowback and stimulation fluids would be contained within tanks that are placed on a well pad or in a lined, bermed area.
- Fluids, additives, and other materials used for drilling and completion operations must be protective of public health and the environment in the areas where they are used.
- For well where a multi-stage high volume hydraulic fracturing is anticipated, the operators shall indicate the method used to handle, transport, and dispose of the recovered fluids.

*For the purpose of:* Minimizing the risk of spills and other contaminants reaching potentially usable groundwater with a water table up to 2,000 feet that is near the surface.

*Justification*: CSU would minimize the risk of water quality contamination and maintain the integrity of potentially usable groundwater resources for present and future uses.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.6.2**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

# **Groundwater Resources**

Surface occupancy or use is subject to the following special operating constraints: Oil and gas operations using multi-stage hydraulic fracturing shall use the following measures to protect potentially usable water bearing intervals:

- The placement of all stimulation fluids shall be confined to the objective formation to the extent practicable.
- In all directions a minimum of 2,500 feet of buffer distance (or greater if deemed necessary by BLM) between the well bore (production string) and the lower extent of shallow (<2,000 feet), potentially usable groundwater (<10,000 total dissolved solids) aquifer, shall be maintained so that fractures from the hydraulic fracturing process do not intersect shallow aquifers.
- A continuous column of cement shall extend from the surface casing shoe back to ground level. If cement is not circulated to surface, then a remedial cement job shall be performed to ensure complete cement coverage.
- A cement bond log shall be required in the surface string.
- Surface casing set depth shall be at least 50 feet below any potentially usable water bearing interval.
- Pitless, self-contained drilling systems.
- In the completion of an oil, gas, injection, disposal, or service well, where acidizing or fracture processes are used, no deleterious substances shall be permitted to pollute subsurface water.
- Fluids, additives, and other materials used for drilling and completion operations must be protective of public health and the environment in the areas where they are used.
- Operators shall indicate the method used to handle, transport, and dispose of the recovered fluids.
- Upon request of the BLM, operators shall provide reports that disclose the complete chemical makeup of all materials used in the proposed and actual drilling and stimulation fluids without regard to original source additive.

*For the purpose of*: Protecting potentially usable groundwater.

*Justification*: CSU would minimize the risk of groundwater contamination and maintain the integrity of potentially usable water bearing intervals for present and future uses.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.7.1**

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

#### **Reservoirs and Lakes**

*No surface occupancy or use is allowed on the lands described below:* For reservoirs and lakes one acre or larger as measured by the high water mark, NSO is stipulated within 0.25 mile of the high water shoreline.

*For the purpose of:* Protecting water quality and the scenic, recreation, wetland, and wildlife values associated with the lake or reservoir and its shoreline.

Justification: Oil and gas development is incompatible with the emphasized use of these areas.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.8.1**

Lease Number: <LEASE NUMBER>

#### LEASE NOTICE

# **Technologically Enhanced Naturally Occurring Radioactive Materials**

Oil and gas operations targeting shale formations have the potential to bring to the surface, and concentrate, naturally occurring radioactive materials. These operations can lead to the spread of radioactive contamination and potential human health risks. Wells targeting shale gas plays are subject to the following special sampling requirements:

- All exploratory wells targeting shale gas formations shall obtain a representative sample
  of cuttings from the targeted formation and complete analysis in accordance with General
  Provision 3.1.6 of the Colorado Department of Public Health and the Environment
  (CDPHE) Interim Policy and Guidance Pending Rulemaking for Control and Disposition
  if Technologically-Enhanced Naturally Occurring Radioactive Materials in Colorado, or
  the equivalent provisions of any future rulemaking decision. The results shall be provided
  to the SJNF and TRFO.
- During the first multi-stage hydraulic fracturing of a well targeting shale gas in any given section, representative samples of cuttings, flowback fluids, produced waters, and sludge shall be analyzed in accordance with General Provision 3.1.6 of the CDPHE Interim Policy and Guidance Pending Rulemaking for Control and Disposition if Technologically-Enhanced Naturally Occurring Radioactive Materials in Colorado, or the equivalent provisions of any future rulemaking decision. The results shall be provided to the SJNF and TRFO.

On the lands described below:

#### EXHIBIT 1.9.1

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

# **Lands with Slopes Greater Than 35 Percent**

*No surface occupancy is allowed on the lands described below:* Lands with slopes greater than 35 percent.

**For the purpose of:** Preventing mass movement and the associated loss of soil productivity, preventing damage to structures and equipment, and protecting riparian areas, wetlands, and aquatic ecosystems from sedimentation and for safety reasons.

*Justification:* Slopes greater than 35 percent have high to very high potential for mass movement and excessive sheet erosion especially when they are impacted by ground-disturbing management activities. These lands are also very difficult to reclaim following disturbance.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.10.1**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

# Lands with 25 to 35 Percent Slopes and Lands with Shale Soils

Surface occupancy or use is subject to the following special operating constraints: Management activities proposed on those lands would require the lessee to submit an operating plan to an authorized official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how soil erosion, soil compaction, and runoff would be prevented or minimized, and how disturbed sites would be reclaimed.

*For the purpose of:* Preventing soil erosion, soil compaction, and runoff and the associated loss of soil productivity, and protecting riparian areas, wetlands, and aquatic ecosystems from sedimentation.

*Justification:* Lands with slopes of 25% to 35% and lands with shale soils have moderate to high potential for soil erosion, soil compaction, and runoff particularly when they are impacted by ground-disturbing management activities.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.11.1**

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

#### **Lands Prone to Mass Movement**

No surface occupancy is allowed on the lands described below: Lands prone to mass movement and lands within a 100-foot buffer around those lands. Lands prone to mass movement include canyon escarpments, hill/mountain dipslopes, lands with unstable geologic formations (including the Morrison, Mancos Shale, Lewis Shale, and Fruitland Formations on the SJNF and TRFO), lands that display evidence of past mass movement (including landslides, landflows, and landslumps), lands lacking vegetation (badlands and burned areas), lands with slopes greater than 35%, and lands associated with map units that have high or very high potential for mass movement (including soil survey map units 254, 386, 606, 720, 926, 20511D, 30506D, 34301D, 34306D, 34506D, 50803D, 50806D, 70806D, 70807D, 74803D, 80604D, 80803D, and 80804D).

*For the purpose of:* Preventing mass movement and the associated loss of soil productivity, as well as damage to structures and equipment, and for safety reasons.

*Justification:* The potential for mass movement and its adverse affects is high to very high for lands prone to mass movement especially when those lands are impacted by ground-disturbing activities. Mass movement could cause ruptured pipelines, water/oil/condensate spills, gas explosions, and damaged storage tanks, and could cause injury to people. Those lands are also very difficult to reclaim.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 1.13.1**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

#### **Lands with Biological Soil Crusts**

Surface occupancy or use is subject to the following special operating constraints: On lands with biological soil crusts exhibiting a Level of Darkness class of 4 or above on the soil surface (see Belnap et al. 2008). Management activities proposed on those lands would require the lessee to submit an operating plan to an authorized BLM or USFS official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how impacts to biological soil crusts would be prevented or minimized, and how disturbed sites would be reclaimed.

For the purpose of: Protecting biological soil crusts and the important ecosystems in which they occur.

*Justification:* Biological soil crusts (also known as microbiotic or cryptogamic crusts) are unique components of biodiversity and important components of the semi-desert shrublands, semi-desert grasslands, sagebrush shrublands, and pinyon-juniper woodlands on the SJNF and TRFO. They play an important role in ecosystem restoration, they are very sensitive to disturbances, and they are very slow to recover from disturbances (Bowker 2007). Ground-disturbing activities could cause direct effects to biological soil crusts including mortality and could cause soil erosion and soil compaction to the associated soils, which could adversely affect the crusts habitat.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### EXHIBIT 2.1.1

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

# Threatened or Endangered Plants, Plants Proposed for Federal Listing, or Candidate Plants for Federal Listing

*No surface occupancy is allowed on the lands described below:* Lands occupied by plant species that are federally listed (threatened or endangered), proposed for federal listing, or candidates for federal listing; lands designated as critical habitat for federally listed species; and lands within a 650 foot (i.e., 200 meter) buffer around all those lands.

For the purpose of: To protect rare plant species and their critical habitat from direct and indirect impacts associated with management actions that could adversely affect their viability and could lead to their extinction.

*Justification:* Management actions on the SJNF and TRFO could affect federally listed plant species (threatened or endangered), plant species proposed for federal listing, and plant species that are candidates for federal listing; and could affect the critical habitat for those species, which could adversely affect the viability of those species and could lead to their extinction.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### EXHIBIT 2.2.1

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

# Colorado Bureau of Land Management State Director's Sensitive Plants and Region 2 Regional Forester's Sensitive Plants

Controlled surface use is allowed on the lands described below: Lands occupied by Colorado BLM State Director's Sensitive Plant Species, Region 2 Regional Forester's Sensitive Plant Species, and on lands within a 325-foot buffer around lands occupied by those plant species. Management activities proposed on those lands would require the lessee to submit an operating plan to a BLM Authorized Official, which may include special design, construction, and implementation measures (including the relocation of operations by more than 650 feet) that describes how impacts to BLM State Director's Sensitive Plant Species and Region 2 Regional Forester's Sensitive Plant Species would be prevented or minimized and how disturbed sites would be reclaimed.

*For the purpose of:* Protecting rare plant species and their habitat from direct and indirect impacts associated with management actions that could adversely affect those rare plants.

*Justification:* Management actions on the SJNF and TRFO could affect Colorado BLM State Director's Sensitive Plant Species, Region 2 Regional Forester's Sensitive Plant Species, and their habitat, which could adversely affect the viability of those species and could lead to a trend to federal listing under the Endangered Species Act.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### EXHIBIT 3.2.1

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

# Lynx Habitat – Landscape Linkage, Denning and Winter Foraging Habitat

Surface occupancy or use is subject to the following special operating constraints: Limitations on surface use and/or operational activities may be required. TL (especially during winter and/or in lynx habitat) and restrictions on snow compaction activities may be applied in consultation with the USFWS as necessary to protect habitat and linkage area function and limit access by potential lynx competitors. Actions would be consistent with direction found in the Lynx Conservation Assessment and Strategy, best available science as determined by the managing agencies and the USFWS, and/or the Southern Rockies Lynx Amendment, each where applicable.

#### On the lands described below:

Within identified current active denning locations
Within identified landscape linkage areas
Within identified lynx habitat in a Lynx Analysis Unit (LAU)

*For the purpose of:* Protection of lynx and lynx habitat in compliance with the Endangered Species Act. H-20 Appendix H - Oil and Gas Leasing Stipulations

*Justification:* The Canada lynx is a threatened species, with suitable habitat within portions of the SJNF and TRFO. CSU would apply in these habitat areas to protect the habitat and the species.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

# **EXHIBIT 3.8.1**

Lease Number: <LEASE\_NUMBER>

#### LEASE NOTICE

# **Migratory Birds**

Avoid or minimize disruption of migratory bird nesting activity by siting or prioritizing vegetation clearing, facility construction, and concentrated operational activities (e.g., drilling, completion, utility installation) to avoid the involvement of higher value migratory bird habitats, particularly during the core migratory bird nesting season (April 1–July 15).

On the lands described below:

#### **EXHIBIT 3.9.1**

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

# Eagles, All Accipiters, Falcons, Buteos, and Owls

*No surface occupancy or use is allowed on the lands described below:* Within specified distance from nest and communal winter roost sites, NSO would be allowed. Distances are listed in Table H.3.

For the purpose of: Provide adequate nesting and roost sites to support species populations.

*Justification:* These raptor species are known to have failed reproduction and abandon nests and communal winter roost sites when human activity occurs within the specified buffer distances from these sites. To increase the likelihood of successful reproduction and recruitment of these species, and to provide adequate roost sites for utilization of their habitat, NSO would be permitted within the specified buffer distances from nest and roost sites (see Table H.3).

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

Table H.3: Raptor Conservation Measures

Table H.3: Kapi	or Conservation Meast			
Species	Impact/Risk	Time Frame	Buffer Distance Restrictions	Reference
Golden eagle	Disturbance	December 15- July 15	Project-related activity should not occur within a 0.5 mile of nest during nesting season. (G)	CPW 2008
Golden eagle	Structural improvements *	Year round	New structures must not occur within 0.5-mile radius of active nest. (S)	CPW 2008
Bald eagle	Disturbance	November 15– July 15	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	SJNF and TRFO
Bald eagle	Structural improvements *	Year round	New structures must not occur within a 0.5-mile radius of active nest. (S)	SJNF and TRFO
Bald eagle	Disturbance	November 15– March 15	Project-related activity should not occur within a 0.25-mile radius (indirect line of sight) or a 0.5-mile radius (direct line of sight) of communal winter roost site.  Limit activity between 1000 and 1400 hours if encroachment would occur within buffer zones.  (G)	CPW 2008
Bald eagle	Structural improvements *	Year round	New structures must not occur within 0.5 mile of communal roost site (S)	SJNF and TRFO
Bald eagle	Disturbance and structural improvements *	Site specific, to be determined by the project biologist	For preferred diurnal hunting perch	CPW 2008
Osprey	Disturbance **	April 1–August 31	Project-related activity should not occur within a 0.25-mile of nest during nesting season.	SJNF and TRFO
Osprey	Structural improvements *	Year-round	New structures should not occur within a 0.25-mile radius of active nest. (G)	CPW 2008
Red-tailed hawk	Disturbance	March 1-July 15	Project-related activity should not occur within 0.125 to 0.25 mile of nest during nesting season, as determined by the project biologist. (G)	SJNF and TRFO
Red-tailed hawk	Structural improvements *	Year-round	New structures should not occur within 0.25-mile radius of active nest. (G)	SJNF and TRFO
Peregrine falcon	Disturbance	March 15–July 31	Project-related activity should not occur within 0.5 mile of nest during nesting season.	CPW 2008
Peregrine falcon	Structural improvements *	Year-round	New structures must not occur within 0.5 mile radius of active cliff nest complex. (S)	CPW 2008
Prairie falcon	Disturbance	March 15–July 15	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	CPW 2008
Prairie falcon	Structural	Year-round	New structures must not occur	CPW 2008

Species	Impact/Risk	Time Frame	Buffer Distance Restrictions	Reference
	improvements *		within a 0.5-mile radius of active nest.	
Northern goshawk	Disturbance	March 1– August 31	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	SJNF and TRFO
Northern goshawk	Structural improvements *	Year-round	New structures should not occur within a 0.5-mile radius of active nest. (G)	CPW 2008
Burrowing owl	Disturbance	March 15- August 15	Project-related activity should not occur within 0.25 mile of nest burrows when owls may be present during nesting season. (G)	SJNF and TRFO
Burrowing owl	Structural improvements *	Year-round	New structures should not occur within a 0.25-mile radius of active nests or within occupied habitat. (G)	Romin and Muck 2002
All other accipter, buteo, falcon, harrier, and owls	Disturbance **	Varied by species	Determination of the application of these specific seasonal restrictions, TL, and/or buffer distances should be made by the project biologist, guided by agency requirements, along with professional knowledge and experience. They would be considered on a case by case basis, taking into consideration site-specific factors such as topography, vegetation, species of raptor, historic patterns of human activity and infrastructure, and observed behaviors of individual birds (G)	Romin and Muck 2002
All other accipter, buteo, falcon, harrier, and owls	Structural improvements *	Varied by species	Determination of the application of these specific seasonal restrictions, TL, and/or buffer distances should be made by the project biologist, guided by agency requirements, along with professional knowledge and experience. They would be considered on a case by case basis, taking into consideration site-specific factors such as topography, vegetation, species of raptor, historic patterns of human activity and infrastructure, and observed behaviors of individual birds. (G)	Romin and Muck 2002

Structures include improvements such as roads, radio towers, oil wells, etc., proposed following nest establishment and is not intended to include structures that historically occurred in the area.

<sup>\*\*</sup> This does not apply to historic levels and patterns of disturbance under which the nest was established and is intended to apply to additional levels and change in disturbance patterns.

Note: "S" indicates an LRMP standard and "G" indicates an LRMP guideline.

#### **EXHIBIT 3.9.2**

Lease Number: <LEASE\_NUMBER>

#### TIMING LIMITATION

# Eagles, All Accipiters, Falcons, Buteos, and Owls

*No surface use is allowed during the following time period(s):* A TL would be applied to lease activities, if surface occupancy is allowed. The TL would apply to all development activities (construction, drilling, workovers, operation, and maintenance). The duration of the timing limitation is species-dependent, and the timing limitation subject to this stipulation are shown in Table H.3.

# For the Purpose of:

*Justifications:* These raptor species are known to have failed reproduction and abandon nests and communal winter roost sites when human activity occurs within the specified buffer distances from these sites. To increase the likelihood of successful reproduction and recruitment of these species, and to provide adequate roost sites for utilization of their habitat, NSO would be permitted within the specified buffer distances from nest and roost sites (see Table H.3).

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

Table H.3: Raptor Conservation Measures

Table H.3: Kapi	or Conservation Meast			
Species	Impact/Risk	Time Frame	Buffer Distance Restrictions	Reference
Golden eagle	Disturbance	December 15- July 15	Project-related activity should not occur within a 0.5 mile of nest during nesting season. (G)	CPW 2008
Golden eagle	Structural improvements *	Year round	New structures must not occur within 0.5-mile radius of active nest. (S)	CPW 2008
Bald eagle	Disturbance	November 15– July 15	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	SJNF and TRFO
Bald eagle	Structural improvements *	Year round	New structures must not occur within a 0.5-mile radius of active nest. (S)	SJNF and TRFO
Bald eagle	Disturbance	November 15– March 15	Project-related activity should not occur within a 0.25-mile radius (indirect line of sight) or a 0.5-mile radius (direct line of sight) of communal winter roost site.  Limit activity between 1000 and 1400 hours if encroachment would occur within buffer zones.  (G)	CPW 2008
Bald eagle	Structural improvements *	Year round	New structures must not occur within 0.5 mile of communal roost site (S)	SJNF and TRFO
Bald eagle	Disturbance and structural improvements *	Site specific, to be determined by the project biologist	For preferred diurnal hunting perch	CPW 2008
Osprey	Disturbance **	April 1–August 31	Project-related activity should not occur within a 0.25-mile of nest during nesting season.	SJNF and TRFO
Osprey	Structural improvements *	Year-round	New structures should not occur within a 0.25-mile radius of active nest. (G)	CPW 2008
Red-tailed hawk	Disturbance	March 1-July 15	Project-related activity should not occur within 0.125 to 0.25 mile of nest during nesting season, as determined by the project biologist. (G)	SJNF and TRFO
Red-tailed hawk	Structural improvements *	Year-round	New structures should not occur within 0.25-mile radius of active nest. (G)	SJNF and TRFO
Peregrine falcon	Disturbance	March 15–July 31	Project-related activity should not occur within 0.5 mile of nest during nesting season.	CPW 2008
Peregrine falcon	Structural improvements *	Year-round	New structures must not occur within 0.5 mile radius of active cliff nest complex. (S)	CPW 2008
Prairie falcon	Disturbance	March 15–July 15	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	CPW 2008
Prairie falcon	Structural	Year-round	New structures must not occur	CPW 2008

Species	Impact/Risk	Time Frame	Buffer Distance Restrictions	Reference
	improvements *		within a 0.5-mile radius of active nest.	
Northern goshawk	Disturbance	March 1– August 31	Project-related activity should not occur within 0.5 mile of nest during nesting season. (G)	SJNF and TRFO
Northern goshawk	Structural improvements *	Year-round	New structures should not occur within a 0.5-mile radius of active nest. (G)	CPW 2008
Burrowing owl	Disturbance	March 15- August 15	Project-related activity should not occur within 0.25 mile of nest burrows when owls may be present during nesting season. (G)	SJNF and TRFO
Burrowing owl	Structural improvements *	Year-round	New structures should not occur within a 0.25-mile radius of active nests or within occupied habitat. (G)	Romin and Muck 2002
All other accipter, buteo, falcon, harrier, and owls	Disturbance **	Varied by species	Determination of the application of these specific seasonal restrictions, TL, and/or buffer distances should be made by the project biologist, guided by agency requirements, along with professional knowledge and experience. They would be considered on a case by case basis, taking into consideration site-specific factors such as topography, vegetation, species of raptor, historic patterns of human activity and infrastructure, and observed behaviors of individual birds (G)	Romin and Muck 2002
All other accipter, buteo, falcon, harrier, and owls	Structural improvements *	Varied by species	Determination of the application of these specific seasonal restrictions, TL, and/or buffer distances should be made by the project biologist, guided by agency requirements, along with professional knowledge and experience. They would be considered on a case by case basis, taking into consideration site-specific factors such as topography, vegetation, species of raptor, historic patterns of human activity and infrastructure, and observed behaviors of individual birds. (G)	Romin and Muck 2002

Structures include improvements such as roads, radio towers, oil wells, etc., proposed following nest establishment and is not intended to include structures that historically occurred in the area.

<sup>\*\*</sup> This does not apply to historic levels and patterns of disturbance under which the nest was established and is intended to apply to additional levels and change in disturbance patterns.

Note: "S" indicates an LRMP standard and "G" indicates an LRMP guideline.

#### **EXHIBIT 3.10.1**

Lease Number: <LEASE\_NUMBER>

#### TIMING LIMITATION

#### **Big Game Parturition**

*No surface use is allowed during the following time period(s):* In areas mapped as big game parturition areas for:

- Pronghorn antelope fawning areas (on SJNF and TRFO lands this includes the overall range for the species): May 1 through July 1
- Elk calving areas: May 15 through June 30
- Rocky Mountain bighorn sheep lambing: April 15 through June 30
- Desert bighorn sheep lambing: February 1 through May 1

For the purpose of: Parturition areas are critical habitat in maintaining herd sustainability. Disturbance during critical times can result in mortality and loss of reproductive recruitment into the population.

*Justifications:* In order to reduce behavioral disruption during parturition and early young rearing period.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 3.10.2**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

# Severe Winter Range, Winter Concentration and Mule Deer Critical Winter Range and Big Game Production Areas

Surface occupancy or use is subject to the following special operating constraints: In order to provide for healthy ungulate populations capable of meeting state population objectives, anthropomorphic activity and improvements should be designed to maintain and continue to provide effective habitat components that support critical life functions. This includes components of size and quality on the landscape providing connectivity to seasonal habitats (wildlife travel corridors), production areas, severe winter range, and winter concentration areas, along with other habitat components necessary to support herd viability.

*For the purpose of:* Protecting priority habitats such as winter concentration areas for big game in order to prevent abandonment of critical habitat, and to maintain reproductive success, recruitment, and survival.

*Justification*: There is a growing body of evidence that TL stipulations on oil and gas development activities are not adequate to protect critical winter habitat and migratory corridors for big game. Managing the concentration and development such as drilling, construction, and the density of surface facilities may be necessary to maintain big game populations in developing areas. Examples may include surface disturbance caps, collocation of facilities, and central gathering facilities, noise reduction, and efforts to minimize traffic and road densities. Routine production activities would be allowed, however workover activities should be handled on a case by case basis.

On the lands described below:

#### **EXHIBIT 3.11.1**

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

#### **Gunnison Prairie Dog**

Surface occupancy or use is subject to the following special operating constraints: A survey of the lease area may be required to determine occupation of Gunnison prairie dog. Development of lease parcels that include prairie dog towns would require one or more of the following conservation measures prior to and during lease development:

- Develop a surface use plan of operations with the managing agencies that integrates and coordinates long-term lease development with measures necessary to minimize adverse impacts to prairie dog populations or their habitat.
- Abide by special daily and seasonal restrictions on construction, drilling, product transport, and service activities during the reproductive period (March 1–June 15).
- Incorporate special modifications to facility siting, design, construction, and operation, or NSO to minimize involvement of prairie dog burrow systems.

*For the purpose of:* Maintaining the integrity and extent of prairie dog complexes, and protecting high value wildlife habitat and recreation values associated with designated state wildlife areas.

*Justification:* Gunnison prairie dog is a designated sensitive species by the managing agencies and a keystone species for the ecosystem.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT 3.13.1**

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

#### State Wildlife Areas -

No surface occupancy is allowed on the lands described below: In state wildlife areas that have federal mineral estate underlying them. NSO and other mitigations would be determined by the managing Agencies in cooperation with CPW. For Perins Peak state wildlife area, this NSO includes the adjacent BLM lands that in combination comprise the Perins Peak Habitat Management Area.

*For the purpose of:* Protect high value wildlife habitat and recreation values associated with designated state wildlife areas.

*Justification:* The State of Colorado is a partner in natural resource management. Many state wildlife areas were purchased and established utilizing federal dollars to accomplish common management objectives complementing similar managements on the planning area.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### EXHIBIT 4.9.1

Lease Number: <LEASE\_NUMBER>

#### NO SURFACE OCCUPANCY

**High Scenic Integrity Objective and Visual Resource Management Class II Areas -** *No surface occupancy or use is allowed on the lands described below:* Foreground areas with a high scenic integrity objective or Visual Resource Management (VRM) Class II. (Note: very high scenic integrity objective and VRM Class I are all within wilderness, recommended wilderness, and wilderness study areas and are therefore not available for lease.)

*For the purpose of:* Protecting the scenic values of these areas.

Justification: These are the areas where viewers have an expectation for high scenic integrity within the foreground viewshed, and where the landscape is to be managed for an overall high scenic integrity objective. Oil and gas exploration and production is typically incompatible with the maintenance of a high scenic integrity and generally inconsistent with protection of valued cultural viewsheds. Oil and gas development introduces industrial facilities and ground disturbance which contrast with natural features.

Exceptions, modifications, and waivers would be considered for BLM leases.

On the lands described below:

#### **EXHIBIT CO-29**

Lease Number: <LEASE\_NUMBER>

#### LEASE NOTICE

The lessee is hereby notified that prior to any surface disturbing activities, an inventory of paleontological resources (fossils) may be required. Mitigation may be required such as monitoring in any area of Probable Fossil Yield Classification (PFYC) 4 or 5 and also upon the discovery of any vertebrate fossil or other scientifically important paleontological resource. Mitigation of scientifically important paleontological resources may include avoidance, monitoring, collection, excavation, or sampling. Mitigation of discovered scientifically important paleontological resources may require the relocation of the surface disturbance activity over 200 meters. Inventory and any subsequent mitigation shall be conducted by a BLM permitted paleontologist.

On the lands described below:

#### **EXHIBIT CO-34**

Lease Number: <LEASE\_NUMBER>

#### ENDANGERED SPECIES ACT SECTION 7 CONSULTATION STIPULATION

The lease area may now or hereafter contain plants, animals, or their habitats determined to be threatened, endangered, or other special status species. BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid BLM-approved activity that will contribute to a need to list such a species or their habitat. BLM may require modifications to or disapprove proposed activity that is likely to result in jeopardy to the continued existence of a proposed or listed threatened or endangered species or result in the destruction or adverse modification of a designated or proposed critical habitat. BLM will not approve any ground-disturbing activity that may affect any such species or critical habitat until it completes its obligations under applicable requirements of the Endangered Species Act as amended, 16 U.S.C. § 1531 et seq., including completion of any required procedure for conference or consultation.

On the lands described below:

#### EXHIBIT CO-39

Lease Number: <LEASE\_NUMBER>

#### CONTROLLED SURFACE USE

This lease may be found to contain historic properties and/or resources protected under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, Native American Graves Protection and Repatriation Act, E.O.13007, or other statutes and executive orders. The BLM will not approve any ground disturbing activities that may affect any such properties or resources until it completes its obligations under applicable requirements of the NHPA and other authorities. The BLM may require modification to exploration or development proposals to protect such properties, or disapprove any activity that is likely to result in adverse effects that cannot be successfully avoided, minimized or mitigated.

Any changes to this stipulation will be made in accordance with the land use plan and/or the regulatory provisions for such changes. (For guidance on the use of this stipulation, see BLM Manual 1624 and 3101 or FS Manual 1950 and 2820.)

On the lands described below:

<LEGAL\_DESCRIPTIONS>

#### **EXHIBIT CO-56**

Lease Number: <LEASE\_NUMBER>

#### LEASE NOTICE

Due to potential air quality concerns, supplementary air quality analysis may be required for any proposed development of this lease. This may include preparing a comprehensive emissions inventory, performing air quality modeling, and initiating interagency consultation with affected land managers and air quality regulators to determine potential mitigation options for any predicted significant impacts from the proposed development. Potential mitigation may include limiting the time, place, and pace of any proposed development, as well as providing for the best air quality control technology and/or management practices necessary to achieve area-wide air resource protection objectives. Mitigation measures would be analyzed through the appropriate level of NEPA analysis to determine effectiveness, and will be required or implemented as a permit condition of approval (COA). At a minimum, all projects and permitted uses implemented under this lease will comply with all applicable National Ambient Air Quality Standards and ensure Air Quality Related Values are protected in nearby Class I or Sensitive Class II areas that are afforded additional air quality protection under the Clean Air Act (CAA).

On the lands described below:

<LEGAL\_DESCRIPTION>

# **ATTACHMENT E: Responses to Public Comments**

# Reponses to Public Comments February 2017 Competitive Oil and Gas Lease Sale

The Bureau of Land Management (BLM) received public comments from 24 individuals and/or organizations regarding the Tres Rios Field Office (TRFO) Determination of NEPA Adequacy (DNA) for the February 2017 oil and gas lease sale. The public comment period was held from August 9 through September 8, 2016. The substantive public comments received and the BLM's responses to those comments are summarized below.

#### Comment 1 – Commenter: Chris Talbot-Heind

**Summary of Substantive Comments** 

- a. Parcel 7795 includes 4 acres of occupied critical Gunnison sage-grouse habitat.
- b. Parcel 7795 is within 4 miles of a lek.
- c. Parcels 7795, 7797, and 7798 are adjacent to occupied critical Gunnison sage-grouse habitat.
- d. Parcels 7795, 7797, 7798, 7799, 7801, 7802, and 7805 are in locations where potential access roads bisect buffers around leks.

# BLM Response to Comment 1(a):

Approximately 3.9 acres of Gunnison sage-grouse (GuSG) critical habitat was identified within Parcel 7795. In accordance with BLM Colorado policy the 3.9 acres of GuSG habitat identified within Parcel 7795 will be deferred from the February 2017 lease sale.

#### *BLM Response to Comments* 1(b) - (d):

With the deferral of the approximately 3.9 acres of GuSG critical habitat that has been identified in Parcel 7795 (as discussed above), there will be no critical habitat for GuSG within any of the TRFO lease parcels proposed for the February 2017 lease sale. While none of the proposed lease parcels contain critical habitat for GuSG, some of the parcels are located adjacent or in close proximity to areas of critical habitat for GuSG. However, the mere proximity of the proposed parcels to GuSG habitat does not preclude the leasing of those parcels.

At the lease-sale stage, the BLM does not yet know 1) if a lease parcel proposed for an oil and gas lease sale will be purchased and result in the issuance of an oil and gas lease; 2) assuming a lease is issued for the proposed lease parcel, whether an application for permit to drill (APD) will be submitted for that lease, and 3) the specific location and operating procedures for oil and gas development that might be proposed for the lease parcel in the future. Moreover, the issuance of a federal oil and gas lease, by itself, does not authorize any surface disturbing oil and gas operations for the leased lands. Instead, if an oil and gas lease is issued, and then an APD is submitted for the lease, surface disturbing oil and gas operations can only be authorized on the lease following a site-specific environmental review in accordance with the National Environmental Policy Act (NEPA) and approval of the APD by the BLM. Furthermore, when conducting its site-specific environmental review of surface disturbances proposed in an APD, the BLM may impose "conditions of approval" (COAs) consistent with the lease terms, stipulations and federal laws and regulations applicable to the lease in order to protect other, non-fluid

mineral resource values, such as wildlife. In addition, pursuant to the standard lease terms contained in BLM Form 3100-11, which are applied to all BLM-issued oil and gas leases, all rights granted under a federal oil and gas lease are subject to compliance with the applicable federal laws, which include the NEPA, the National Historic Preservation Act and the Endangered Species Act (ESA), just to name a few. As such, if in the future an APD is submitted for one of the proposed lease parcels, and the required site-specific environmental review of the oil and gas activities proposed in that APD indicate that the proposed activities have the potential to adversely impact GuSG, a species that has been listed as threatened under the ESA, the BLM could impose protective and/or mitigating measures in the form of COAs and/or require a modification to the location, design or some other aspect of the proposal, and it could only authorize oil and gas activities pursuant to that APD if it determines, in consultation with the U.S. Fish and Wildlife Service, that the authorized activities would not be likely to "jeopardize the continued existence" or result in the "destruction or adverse modification" of critical habitat for GuSG.

The DNA that has been prepared for the February 2017 lease sale verified that the Approved RMP and Final Environmental Impact Statement (FEIS) for the TRFO adequately analyzed and ensured the availability of appropriate protective measures to address the reasonably foreseeable impacts of oil and gas development on other resources values, including GuSG, and that analysis would be followed up and enhanced by the site- and project-specific environmental analysis that would be required if and when an APD is received for any of the proposed lease parcels. This site-specific environmental review that would be required if and when an APD is received for any of the proposed lease parcels will, in turn, guide the BLM's decision to either: approve; not approve; or approve with conditions any oil and gas operations proposed in the future for the parcels. Attempting to analyze the specific impacts of oil and gas operations without specific knowledge of the location, number and nature of any wells and associated infrastructure (such as an access road) that might be proposed for a lease parcel in the future would be speculative and not contribute to making a well-informed leasing decision.

# **Comment 2 – Commenter: Alex Badgett**

**Summary of Substantive Comments** 

- a. Certain lands in the lease sale are within critical Gunnison sage-grouse habitat.
- b. Parcel 7795 contains 4 acres of occupied critical Gunnison sage-grouse habitat.
- c. 86 acres are within 4 miles of Gunnison sage-grouse leks.
- d. Parcel 7795, 7797, and 7798 are adjacent to occupied critical Gunnison sage-grouse habitat.
- e. Parcels 7795, 7797, 7798, 7799, 7801, 7802, and 7805 are in a location where some potential access roads bisect 0.6 mile buffers around the leks.

BLM Response to Comments 2(a)- (b):

*See the response to Comment 1(a) above.* 

BLM Response to Comments 2 (c)-(e): See the response to Comments 1(b)-(d) above.

# **Comment 3 – Commenter: Larry Kimball**

**Summary of Substantive Comments** 

a. No drilling in this (GuSG) very threatened species habitat.

BLM Response to Comment 3(a):

See the response to Comments I(a)-(d) above.

#### Comment 4 - Sandra Materi

**Summary of Substantive Comments** 

- a. Please do not lease in Gunnison sage-grouse occupied habitat.
- b. Parcel 7795 includes 4 acres of occupied critical Gunnison sage-grouse habitat, and roughly 86 acres within 4 miles of a Gunnison sage-grouse lek.
- c. Parcels 7795, 7797, and 7798 are directly adjacent to occupied critical Gunnison sagegrouse habitat.
- d. Parcels 7795, 7797, 7798, 7799, 7801, 7802, and 7805 are in a location where some potential access roads bisect 0.6 mile buffers around the leks.

BLM Response to Comment 4 (b):

*See the response to Comment 1(a) above.* 

BLM Response to Comments 4(a) and (c)-(d):

See the response to Comment 1(b)-(d) above.

#### Comment 5 – Commenter: U.S. Fish and Wildlife Service

**Summary of Substantive Comments** 

- a. Due to the potential for indirect impacts to GuSG in the San Miguel population, we recommend deferral of the parcels adjacent to occupied critical habitat (i.e. parcels 7795, 7797, 7798) until the BLM GuSG plan amendment process is finished.
- b. It is possible that GuSG protections will be identified in the plan amendment that are not currently contained within the Tres Rios RMP, and, therefore not currently applied to any parcels currently under consideration for leasing.
- c. We recommend that BLM consider requiring a Master Leasing Plan for parcels near GuSG occupied habitat to address noise, increased truck traffic, new access roads, and other associated human disturbance.
- d. We also recommended that BLM consider limiting surface disturbance to one well pad per section near habitat occupied by GuSG to minimize indirect impacts to the species (as is consistent with the rationale contained in Controlled Surface Use (CSU) stipulation 3.10.2).

BLM Response to Comment 5(a):

See the response to Comments 1(b)-(d) above.

BLM Response to Comment 5(b):

The standard lease terms contained in BLM Form 3100-11 are applied to all BLM-issued oil and gas leases, and these terms would be applied to any leases issued for the lease parcels proposed for the February 2017 oil and gas lease sale. Pursuant to these standard lease terms all rights granted under a federal oil and gas lease are subject to compliance with the applicable federal laws, including the ESA. As such, if in the future an APD is submitted for one of the proposed lease parcels, and the required site-specific environmental review of the oil and gas activities proposed in that APD indicate that the proposed activities have the potential to adversely impact GuSG, a species that is protected as threatened under the ESA, the BLM could impose protective and/or mitigating measures in the form of COAs and/or require a modification to the location, design or some other aspect of the proposal, and it could only authorize oil and gas activities pursuant to that APD if it determines, in consultation with the U.S. Fish and Wildlife Service, that the authorized activities would not be likely to "jeopardize the continued existence" or result in the "destruction or adverse modification" of critical habitat for GuSG. In light of the protections already available pursuant to the standard lease terms and the ESA, along with the fact that none of the TRFO parcels proposed for offering at the February 2017 lease sale contain critical habitat for GuSG (after the deferral discussed for Parcel 7795 in Comment Response 1(a) above), the deferral of additional parcels pending the completion of the GuSG Plan Amendment process does not appear warranted at this time.

BLM Response to Comments 5(c)-(d): See the response to Comments 1(b)-(d) above.

# **Comment 6 – Commenter: Rocky Mountain Wild**

**Summary of Substantive Comments** 

- a. Parcel 7795 includes 4 acres of occupied critical Gunnison sage-grouse habitat, and roughly 86 acres within 4 miles of a Gunnison sage-grouse lek.
- b. Parcels 7378, 7787, 7795 and 7797 should be deferred from the lease sale. These parcels fall within potential Areas of Critical Environmental Concern (ACECs).
- c. Parcel 7792 should be deferred from the lease sale. This parcel is in the designated Gypsum Valley Area of Critical Environmental Concern.
- d. Parcels 7795, 7797, 7801, 7802, and 7805 overlap with the Dry Creek Basin State Wildlife Area.
- e. BLM should complete Environmental Assessments for all oil and gas lease sales in compliance with IM 2010-117, with specific exceptions only for areas with comprehensive Master Leasing Plans in place.
- f. BLM's Determination of NEPA Adequacy prepared for the February 2017 lease sale is inadequate to analyze and provide for public review of the proposed lease sale parcels.
- g. The BLM's Determination of NEPA Adequacy is inadequate to analyze the impacts of leasing on Gunnison sage-grouse.
- h. Stipulations have not been attached to these lease parcels in conformance with the BLM Tres Rios Field Office, San Juan National Forest Land and Resource Management Plan Final Environmental Impact Statement.

i. Leasing of these parcels will have significant negative impacts on Gunnison sagegrouse that have not been analyzed in the Tres Rios RMP/FEIS and an EIS is necessary.

#### *BLM Response to comment 6(a):*

See the response to Comments I(a)-(d) above.

#### *BLM Response to Comments 6(b)-(c):*

Pursuant to the Federal Land Policy and Management Act and its implementing regulations, the BLM is required to identify and consider areas that meet the criteria of "relevance" and "importance" for designation and protection as Areas of Critical Environmental Concern (ACECs) during the land use planning process. See 43 CFR §16107-2; see also 43 U.S.C. § 1712. With respect to the lands within the Gypsum Valley ACEC and the areas of proposed ACECs currently being reconsidered for ACEC designation, these areas were previously considered during the land use planning process to revise the current TRFO RMP and under the currently approved TRFO RMP these areas have been designated as available for oil and gas leasing, subject to protective stipulations. The Federal Land Policy and Management Act and its implementing regulations have also tasked the BLM with managing the public lands in manner that "conform[s] to the approved [land use] plan." 43 U.S.C. § 1712; 43 CFR § 1610.5-3. The proposal to lease parcels 7378, 7787, 7792, 7795 and 7797 at the February 2017 oil and gas lease sale is in conformance with the currently approved land use plan.

#### BLM Response to Comments 6(d):

Pursuant to the TRFO Approved RMP the proposed lease parcels overlapping the State Wildlife Area have been designated as available for oil and gas leasing, subject to the lease stipulation 3.13.1, No Surface Occupancy (NSO) for State Wildlife Areas. This stipulation has been attached to the proposed parcels, as applicable, and it will ensure that surface resources in State Wildlife Areas are appropriately protected from any future oil and gas development within the subject parcels.

#### *BLM Response to Comment 6(e):*

The commenter has misstated the requirements of Washington Office (WO) IM No. 2010-117. The DNA prepared by the TRFO for the February 2017 oil and gas lease sale documents the BLM's review and verification that the TRFO Approved RMP and FEIS adequately analyzed the reasonably foreseeable impacts of and applied appropriate protective measures for any future oil and gas development associated with the proposed lease parcels. Any oil and gas leases that are issued for the proposed parcels would be issued subject to the standard lease terms contained in BLM Form 3100-11 and the protective stipulations required for each parcel, as described in Appendix H of the TRFO Approved RMP, and the DNA and Sale Notice for the February 2017 oil and gas lease sale. The Approved RMP, DNA and Sale Notice have been and are available for public review.

#### *BLM Response to Comment 6(f):*

The opportunities for public involvement with the February 2017 oil and gas lease sale include/included an initial public scoping period held May 9 to June 8, 2016, a public comment period held August 9 to September 8, 2016, and a 30-day protest period that is planned for November 10 to December 12, 2016.

# BLM Response to Comments 6(g) and (i):

The TRFO RMP/FEIS contains a robust analysis of potential impacts to GuSG from oil and gas operations. See also the response to Comments 1(b)-(d) above.

#### BLM Response to Comment 6(h):

All applicable stipulations have been attached to the proposed lease parcels.

# **Comment 7 – Commenter: Center for Biological Diversity**

**Summary of Substantive Comments** 

- a. The DNA Does Not Consider New Information showing Foreseeable Impacts on Endangered Fish
- b. BLM Cannot Tier to the RMP, Because It Fails to Analyze the Greenhouse Gas Emissions Impacts of Oil and Gas Leasing.
- c. Reliance on the RMP-EIS is inappropriate, because it fails to consider other significant environmental impacts.

#### BLM Response to Comment 7(a):

At the lease-sale stage, the BLM does not yet know 1) if a lease parcel proposed for an oil and gas lease sale will be purchased and result in the issuance of an oil and gas lease; 2) assuming a lease is issued for the proposed lease parcel, whether an application for permit to drill (APD) will be submitted for that lease, and 3) the specific location and operating procedures for oil and gas development that might be proposed for the lease parcel in the future. Moreover, the issuance of a federal oil and gas lease, by itself, does not authorize any surface disturbing oil and gas operations for the leased lands. Instead, if an oil and gas lease is issued, and then an APD is submitted for the lease, surface disturbing oil and gas operations can only be authorized on the lease following a sitespecific environmental review in accordance with the National Environmental Policy Act (NEPA) and approval of the APD by the BLM. As such, at the leasing stage detailed information concerning any potentially proposed water use, including water sources, water quantities, diversion locations, and diversion timing for oil and gas operations that might be proposed in the future is not available. Instead, water depletion issues are analyzed in detail when the operator submits an APD and BLM conducts site-specific NEPA analysis on the application. In the application, the operator is required to describe the water to be used for drilling operations. This information is used to identify impacts to specific water bodies and water-dependent species. If the potential depletion is determined to have a potential impact on threatened or endangered species, BLM consults (either informally or formally) with the U.S. Fish and Wildlife Service on the water depletion issue in order to ensure that a potential BLM authorization will not be likely to "jeopardize the continued existence" or result in the "destruction or adverse modification" of critical habitat for any species protected by the ESA.

#### BLM Response to Comment 7(b):

The TRFO RMP/FEIS includes a qualitative discussion on the correlation between oil and gas operations, greenhouse gas (GHG) emissions, and climate change in Sections 3.12 - Air Quality; 3.12.2 - Affected Environment, Greenhouse Gas Emissions and Climate Change, pages 364 and 365 and under numerous discussion topics in Section 3.12, pages 364 - 378 of the RMP. This discussion appropriately and adequately addresses the reasonably foreseeable impacts that oil and gas leasing within the planning area might have on GHG emissions and climate change. It is impossible to quantify, with accuracy, the specific impacts to climate of GHG emissions associated with potential future oil and development from the proposed lease parcels when it is unknown what facilities might be associated with future production, if any. No new data was presented with this argument. If oil and gas operations are proposed for any of the subject lease parcels, BLM will complete a site-specific NEPA analysis of the proposal(s) utilizing the best available and most current data. This site-specific NEPA analysis will, in turn, guide the BLM's decision to either: approve; not approve; or approve with conditions the proposed oil and gas operations. Any potential future emissions resulting from an approval of any permit(s) for exploration and development is not anticipated to change the predictions made in the TRFO RMP/FEIS regarding the impacts of climate change, due to the cumulative and global scale of the issue.

# BLM Response to Comment 7(c):

The DNA prepared by the TRFO for the February 2017 oil and gas lease sale documents the BLM's review and verification that the TRFO Approved RMP and FEIS adequately analyzed the reasonably foreseeable impacts of and applied appropriate protective measures for any future oil and gas development associated with the proposed lease parcels. Any oil and gas leases that are issued for the proposed parcels would be issued subject to the standard lease terms contained in BLM Form 3100-11 and the protective stipulations required for each parcel, as described in Appendix H of the Approved TRFO RMP, and the DNA and Sale Notice that have been prepared for the February 2017 competitive oil and gas lease sale. Pursuant to the standard lease terms contained in BLM Form 3100-11 the lease rights granted are subject to adherence with the applicable federal statutes and regulations, which includes the Federal Land Policy and Management Act (FLPMA) and the Mineral Leasing Act (MLA). Section 4 of the standard lease terms requires that the lessee exercise reasonable diligence in order to, "prevent unnecessary damage to, loss of, or waste of leased resources." Section 6 of the standard lease terms provides that the lessee conduct operations in a manner that minimizes adverse impacts to the land, air, and water, to cultural, biological, visual, and other resources, and to other land uses or users." The stipulations applied to each parcel have been developed through the TRFO FEIS and Approved RMP in order to adequately protect other resources that may be present and that have not been specifically addressed through the standard lease terms. The application of the standard lease terms and protective stipulations to any leases that might be issued for the proposed parcels will help to ensure that any future oil and gas development on the parcels occurs in full compliance with the FLPMA, the MLA, and the NEPA and does not result in any significant impacts to the human environment. The comment has not provided information regarding any potential significant impacts associated with leasing the

subject parcels that have not already been adequately considered in the TRFO Approved RMP and FEIS.

# Comment 8 - Commenter - Colorado Parks and Wildlife

**Summary of Substantive Comments** 

- a. Due to the potential for indirect impacts to GuSG in the San Miguel population, we recommend deferral of parcels adjacent to occupied critical habitat (e.g. parcels 7795,7797, and 7798) until the BLM GuSG plan amendment process is finished.
- b. We recommend that BLM consider requiring a Master Leasing Plan for parcels near GuSG occupied habitat to address noise, increased truck traffic, new access roads, and other associated human disturbance.

BLM Response to Comments 8(a)-(b):

See the response to Comments I(b)-(d) above.

# Comment 9 – Commenter: San Miguel County Board of Commissioners Summary of Substantive Comments

- a. Lease Sale Does Not Meet BLM NEPA Adequacy Criteria.
- b. San Miguel County believes that the listing of the GuSG and designation of critical habitat is a new circumstance that requires modification of the TRFO RMP/FEIS.
- c. The TRFO RMP/FEIS fails to analyze oil and gas leasing impacts and stipulations within several proposed Areas of Critical Environmental Concern (ACECs).
- d. Parcels 7795, 7797, and 7798 still intersect occupied critical Gunnison sagegrouse (GuSG) habitat within the important Dry Creek Basin area and should be deferred.
- e. Parcel 7795 is within 4 miles of a GuSG lek. All parcels within 4 miles of a GuSG lek should be deferred.
- f. Parcel 7801 intersects private land and occupied GuSG habitat that is also within a Conservation Easement or soon planned to be encumbered by a conservation easement for the purpose of GuSG protection.
- g. Parcels 7795, 7797, 7801, 7802, and 7805 intersect the Dry Creek Basin State Wildlife Area.
- h. It is unclear if the Dry Creek Basin SWA stipulation contained in Exhibit 3.13.1 will actually result in a No Surface Occupancy requirement.
- i. Parcel 7792 should be deferred from the lease sale and made permanently Not Available for Lease.

#### BLM Response to Comment 9(a):

The DNA prepared by the TRFO for the February 2017 oil and gas lease sale documents the BLM's review and verification that the TRFO Approved RMP and FEIS adequately analyzed the reasonably foreseeable impacts of and applied appropriate protective measures for any future oil and gas development associated with the proposed lease parcels in accordance with the NEPA. Any oil and gas leases that are issued for the proposed parcels would be issued subject to the standard lease terms contained in BLM Form 3100-11 and the protective stipulations required for each parcel, as described in Appendix H of the TRFO Approved RMP, and the DNA and Sale Notice for the February 2017 oil and gas lease sale.

# BLM Response to Comments 9(b)-(f):

See the response to Comments I(a)-(d) above.

# BLM Response to Comments 9(g)-(h):

Pursuant to the TRFO Approved RMP the proposed lease parcels overlapping the State Wildlife Area have been designated as available for oil and gas leasing, subject to the lease stipulation 3.13.1, NSO for State Wildlife Areas. Anywhere that the proposed lease parcels intersect State Wildlife Areas, the BLM TRFO has applied stipulation 3.13.1. This stipulation has been attached to the proposed parcels, as applicable, and it will ensure that surface resources in State Wildlife Areas are appropriately protected from any future oil and gas development within the subject parcels.

#### BLM Response to Comment 9(i):

In accordance with section 17 (a) MLA, 30 U.S.C. § 226 (a), the BLM has been provided discretionary authority to decide whether and which federal lands to lease for oil and gas development. In addition, the FLPMA and its implementing regulations have also tasked the BLM with managing the public lands in manner that "conform[s] to the approved [land use] plan." 43 U.S.C. § 1712; 43 CFR § 1610.5-3. Under the currently approved land use plan (the TRFO Approved RMP) parcel7792 has been designated as available for oil and gas leasing, subject to protective stipulations. As such, the proposal to lease this parcel at the February 2017 oil and gas lease sale is in conformance with the currently approved TRFO RMP. At this time, the commenter has not provided a justifiable rationale in support of deferring the subject parcel.